REQUEST FOR PROPOSAL

For

CONSTRUCTION SUPERVISION AND INSPECTION SERVICES

for construction of SLC project facilities near Kulasekarapattinam, Tuticorin Dt, Tamil Nadu

(Civil, PH, Road, Electrical, AC and Mechanical works)

Satish Dhawan Space Centre SHAR
Indian Space Research Organization
Sriharikota -524 124, A.P

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Proposals are invited from the interested firms for the enclosed scope of work in two-part bid. Part-1 Technical and unpriced commercial part of the work and Part-2 Priced commercial part.

The RFP document is organized in four sections as follows:

Section –A	Introduction of proposed facilities
Section –B	Scope of work
Section –C	General terms & conditions
Section –D	Annexures

Title of the Entity: SSLV Launch Complex (SSLV) Project, SDSC SHAR

Title of the proposal: Construction supervision and inspection services for construction of SLC facilities (Civil, PH, Road, Electrical, AC and Mechanical works)

Contract period :

The contract period for the scope of the work under this contract is **24 months (**Twenty four months**) or till completion of construction contract whichever is later.**

1. PROPOSAL DOCUMENT

1.1 Transfer of proposal document issued to one Bidder to another is not permissible.

1.2 Proposal document shall remain the property of Department and if obtained by one intending Bidder shall not be utilizable by another without the consent of the Department.

1.3 The proposal (Un-priced techno-commercial bid) with a complete set of he required document shall be up-loaded in ISRO e-procurement website.

1.4 The proposal shall be submitted on-line before the time limit for bid submission specified in the letter inviting bid.

1.5 Tender shall submit the ‘open ‘authorization online within the time limits specified in the letter inviting bid.

1.6 The proposal will be opened on the date and on the time specified in the letter inviting bid or as soon thereafter as convenient. Proposal not received in time will not be considered.

1.7 Bidders shall set their quotations in firm figures and without variations/ additions in the terms of the proposal documents.

1.8 Addenda/Corrigenda

Addenda /corrigenda to the tender document may be issued by SDSC SHAR prior to the date of opening of the tenders, to clarify or reflect modification in the contract terms and conditions. Such addenda/corrigenda will be distributed to each firm or person who had purchased the tender documents.

1.10 Ambiguity

Should there be any ambiguity or doubt as to the meaning of any of the tender clause/ conditions or if any further information is required, the matter shall be immediately brought to the notice of Sr.Head, Purchase & Stores, SDSC SHAR in writing for necessary clarifications prior to the opening of the tenders.

2. PREPARATION OF BIDS

2.1 Site visit

The Tenderer shall visit SLC site, Kulasekarapatinam, Thiruchendur Tk., Tuticorin Dt., Tamil Nadu and acquaint himself fully with the requirements and no claims whatsoever will be entertained on the plea of ignorance of difficulties in the execution of the work. Before submitting the tender, the tender shall be deemed to have clearly understood and satisfied himself regarding the work and services, all conditions liable to be encountered during the execution thereof and the prices, and/or compensation quoted in the offer are adequate and all inclusive will respect to all factors, circumstance and conditions likely to be incidental both direct and indirect, to the work and services.

2.2 Validity of offer

Bid shall remain valid for acceptance of the period of 6 (Six) months from the due date of submission of the Bid. The Tenderer shall not be entitled during the said period to revoke or cancel his Bid or to vary the Bid except and to the extent required by Department and communicated in writing. Bid may be revalidated for extended period as required by Department in writing. In such cases, unless otherwise specified, it is understood that validity is sought and provided without varying either the quoted price or any other terms and conditions of Bid finalized till that time.

2.3 Cost of bidding

All direct and indirect costs associated with the preparation and submission of Bid (including clarification meetings and site visit, if any) shall be to Tenderer's account and the Department will in no case be responsible or liable for those costs, regardless of the conduct or outcome of the Bid process.

2.4 Applicable language

The Bid and all corresponding incidentals to and concerning the Bid shall be in the English language. For supporting document and printing literature submitted in any other language, an accurate English translation shall also be submitted. Responsibility for correctness in translation shall lie with the tenderer.

2.5 Arrangement of bid

a) The Bid Shall be neatly presented on white paper with consecutively numbered pages. ***It should not contain any terms and conditions which are not applicable to the Bid.***

b) The Bid and all details submitted by the Tenderer shall be signed and stamped on each page as token of acceptance by a Person. By a person, legally authorized to enter into agreement on behalf of the Tenderer. Corrections/alteration if any, shall also be signed by the same person. Tender shall submit Power of Attorney in favour of the person who signs the Bid and subsequent submissions on behalf of the Tenderer.

c) Department will not be bound by any Power of Attorney granted by the Tenderer or changes in the constitution of firm made subsequent to submission of the Bid or after the award of the contract. Tenderer may however, recognize such Power of Attorney and changes after obtaining proper legal advice, the cost of which will be borne by the Tenderer.

d) The cancellation of any document such as Power of Attorney, Partnership Deed etc should be communicated by the Tenderer to the Department in writing well in time, failing which Department shall have no responsibility or liability for any action taken by Tenderer on the strength of the said documents.

e) Should the Tenderer have a relative or relatives or in the case of firm or company one or more of its shareholders or a relative or relatives of the shareholder(s) employed in a senior capacity in Department's organization, the authority inviting Bids shall be informed of the fact at the time of submission of the Bid , failing which the Bid may be disqualified or, if such fact subsequently comes to light, Department reserves the right to take any other action as it deems fit in accordance with any applicable law, Rules, Regulations of the like in force for the time being.

2.6 Schedule of price

The schedule of prices shall be read in conjunction with all the sections of proposal document. The price must be filled in the 'Format for schedule of prices' – Annexure-1

2.7 Documents comprising the bid

Bids shall be arranged in the following order:

2.7.1 Part – 1 Technical and unpriced commercial part:

Technical and unpriced commercial part shall comprise the attachments, specifying attachment number arranged in the order as follows:

a) Submission of bid letter along with one set of proposal document duly signed and stamped as token of acceptance.
b) Copy of Company's registration number certificate.
c) All the annexure enclosed in proposal duly filled, signed and sealed.
d) Unpriced copy of schedule of price with all other commercial terms and conditions duly filled (prices to be kept blank) , signed and stamped. i.e. Annexure-1. Annexure-2 format also be the filled and uploaded.
e) Audited balance sheet including profit and loss account for the last three financial years showing annual turnover.
f) Latest income tax clearances certificate.

g) List of projects in hand & completed during the last 3 financial years indicating the name of client, contact person, contract value, nature of work, work completed, work balance, name of consultant, month & year of commencement & completion etc.

h) Organization chart for the proposed work with bio data of key personnel.

i) Pre-qualification criteria with supporting documents.

2.7.2 Part – 2 Price bid.

Price bid shall be filled in the on-line 'price bid' form of the e-tender only in ISRO e- procurement website https://eprocure.isro.gov.in.

SDSC SHAR may open Part-1 of the bid on the due date of opening subject to meeting the bid evaluation criteria. Price Bid (Part-2) of technically and commercially acceptable offers shall be opened at a later date.

b) SDSC SHSAR reserves the right to reject any or all the Bids without assigning any reasons thereof.

c) ***Any bids/ offers with price details in Techno-commercial offer (Part-1) shall be rejected.***

d) SDSC SHR reserves the right to place order for either full quantities of all items or partial quantities and partial items based on the unit rates available.

2.8 Contract period

The contract period for the scope of the work under this contract is **24 months** (Twenty Four months) **or till completion of construction contract whichever is later**.

3. PRE-QUALIFICATION CRITERIA

Sl. No	CRITERIA	VENDOR COMPLIANCE (YES*/NO)
3.1	Tender shall have experience in Construction supervision of similar tall RCC framed structures/buildings of minimum 15 m height which involves RCC, steel, masonry and pile foundations etc.	
3.2	Prior experience of minimum 5 years in providing Supervision & Inspection services for construction works which involves RCC, steel, masonry, electrical works, steel door works, gantry girders, heavy steel motorized doors, AC works like ducting chillers, AHUs etc.	
3.3	Tenders shall have a minimum Graduate Engineers of 20 number and Diploma Engineers of 30 number from Civil, Electrical, AC & Mechanical on permanent rolls.	
3.4	Party shall have average annual turnover of at least **Rs 75.00 lakhs** during last 3 years on an average. Party shall submit the documentary proofs for supporting the above criteria. Department may visit the works executed or being executed for evaluation.	
3.5	Solvency certificate of Min. Rs.20.00 L in Current Financial year	
3.6	Party should have satisfactorily completed the works during the last 7 years as mentioned below: • One single order value of similar work costing not less than Rs. 120.00 Lakhs (or) • Two orders value of similar works each costing not less than Rs. 90.00 Lakhs	
*If YES, please support with valid documents as proof.		

4. DETERMINATION OF RESPONSIVENESS

The bid which does not satisfy the pre-qualification as criteria as mentioned in Section (Clause) 3 above shall summarily be rejected and shall not be consider for further evaluation. SDSC SHAR will scrutinize bids to determine whether the bid is substantially responsive to the requirements of the tender documents. For the purpose of this clause, a substantially responsive bid is one which inter-alia conforms to all the terms and conditions of the entire Tender document without any deviations and reservations. The decision of SDSC SHAR shall be final in this regard.

5. BID EVALUATION

5.1 During evaluation, Department may request Tenderer for any clarification on the bid upon additional documents

5.2 Techno-commercial discussion shall be arranged with Tenderer, if needed. Tenderer shall depute his authorized representatives for attending discussions, The representatives attending the discussions shall produce authorization from his organization to attend the discussion and sign Minutes of meeting on behalf of his organization if required. The authorized representative must be competent and empowered to settle/decide on all technical and commercial issues.

5.3 The complete scope of work is defined in the Proposal document. Only those Tenderers who undertake total responsibility for the complete scope of work as defined in the Proposal document shall be considered.

5.4 In case Bid does not fully comply with the requirement of Proposal document and the Tenderer stipulated deviations to the clauses of the proposal in Schedule of deviations, which are unacceptable to the department, the Bid will be rejected.

5.5 Performance of the Tenderer on similar works already executed/ under execution shall be taken into consideration before selecting the Tenderer for opening his price bid.

5.6 Department reserves the right to visit clients site for verification/validation.

5.7 The time schedule for completion is given in the Proposal document. Tenderer is required to confirm the completion period unconditionally.

5.8 Department reserves the right to accept a bid other than a lowest and to accept or reject any bid in full or part without assigning any reasons. Such decisions by the Department shall bear no liability on the Department whatsoever consequent upon such decision.

5.9 The Tenderer, whose bid is accepted by the Department shall be issued a Letter of Intent (LOI) to proceed with the work. ***Tenderer shall confirm acceptance by returning a signed copy of the LOI along 3 % of total order value as security deposit within 10 days from LOI.*** Security Deposit shall be in the form of Bank Guarantee from nationalized/scheduled bank or by Demand Draft valid till completion of the contract period plus sixty days towards claim period for faithful execution of the contract. Thereafter Department may issue purchase order or Department will sign the Contract with successful Tenderer.

5.10 Department shall not be obliged to furnish any information / clarification to unsuccessful Tenderers as regards to non acceptance of their Bids.

5.11 Overall L1 will be recommended for placement of purchase order. Split orders will not be possible.

SECTION-A
INTRODUCTION OF PROPOSED FACILITIES

1. INTRODUCTION

SLC Project, SDSC SHAR, Sriharikota invites tenders from suitable agencies through E Procurement portal for "Providing Construction Supervision and Inspection services" for SLC facility civil construction (Civil, PH, Road, Electrical, AC and Mechanical works). The work order shall be delivered/executed at **SLC Project Site, Near Kulasekarappatinam, Thoothukudi District, Tamil Nadu**.

2. FACILITIES COVERED UNDER THE CONSTRUCTION WORK

S.No	SLC Facility Name
1.	SSLV Assembly Facility (SAF) Including MLP track, Jet Deflector Duct(JDD), Launch pad Terminal room and External Firefighting (FF)
2.	Satellite Preparation Facility (SPF)
3.	Nozzle Assembly and Stage Preparation Facility (NASPF)
4.	Non Destructive Facility (NDT)
5.	Upper Stage Assembly Facility- 1(UAF -1)
6.	Upper Stage Assembly Facility- 2(UAF -2)
7.	Launch Service Building
8.	Segment Storage and Magazine (SSM)
9.	Launch Control Centre / Mission Control Centre (LCC/MCC)
10.	Technical Service Building(TSB), Base Fire Station(BFS) + 50 cum GLR, Ground level Reservoir(GLR)
11.	Main Receiving Station(MRS), Sub-station A, Launch Pad & 8 nos. of compact substation
12.	Radar Building 1,2 & 3, Telemetry and Telecommand,
13.	Material Handling (MAHAN) and Balloon shed
14.	De-contamination Plant (DCP for Fuel and Oxidiser), Effluent treatment plant.
15.	Water Treatment Plant, 500 Cum GLR and External water supply
16.	400 cum RWG GLR, Pump House, Pumps and plumbing lines.
17.	External Electrical Works.
18.	Approach road and Top coat
19.	Service Trench
20.	Lightning Protection Towers (3Nos)
21.	Compound Wall

Brief note on major SLC facilities are as given below:

2.1 SSLV Assembly Facility (SAF)

SAF caters the need of vertical assembly of SSLV rocket. It is a multi-store building having approach at different elevated levels to facilitate the launch vehicle assembly operation. The brief area of the facility is given below.

S.No	Description	Value (LxWxH) M	Remarks
1.	Main Building Size	29.2 X 64.1 X 58.23	High Bay 33 X 8.7 (Low bay)
2.	Satellite Cool air pump building (AC)	20.4 X 17.2	Low bay
3.	Brine Chiller area	8 x 7	------
4.	Chiller Area	11 x 18	-------
5.	Ramp and Approaching road as per requirement	------	------
6.	Number of Elevation for rocket approach	11 Nos.	Height Min. 3250 to max. 5000 (excluding EOT head room height)
7.	Electrical Fittings	As per Requirement	Type :- FLP / Normal
8.	HVAC Systems	Chiller, AHU with Temperature and RH Controlled system	
9.	PH	As per Requirement	
10.	Fire safety	Fire Hydrant as per requirement	
11.	Horizontal Sliding Door and Platforms	As per the Requirement	
12.	Passenger Lift (2 Nos.)	As per the Requirement	
13.	MLP Rail Track with concrete basement	700 meter length	For vehicle movement
14.	Jet Deflector Duct (JDD)	As per Requirement	Refractory based below FFL structure

2.2 Satellite preparation Facility (SPF)

SPF, fulfill the satellite preparation requirements for the launch. It is equipped with to receive the satellites , de containerization, preparation, necessities for fuel filling, health monitor, encapsulation assembly of satellite and final transport to SAF.

S.No	Description	Value (LxWxH) mtr	Remarks
1.	Main Building Size	50.9 x 54.6 Height varies from 4.2 (low bay) to 21.8 mtr (high bay)	Includes, Satellite Preparation hall, VTM Preparation hall, Air lock room, Encapsulated assembly hall, Check out room, Fuel & oxidizer stabilization and control rooms, Material Handling room, Service room &lobby , AC Service room
2.	Satellite service room (annex)	13.7 x 32.4	Low bay Clean room accessories, Discussion room and transit rooms.
3.	Ramp and Approaching road as per requirement	------	------
4.	Electrical Fittings	As per Requirement	Type :- FLP / Normal Electrical Service room
5.	Fire safety	Fire Hydrant as per requirement	
6.	PH	As per Requirement	
7.	HVAC Systems	Chiller, AHU with Temperature and RH Controlled system	
8.	Sliding Door	As per Requirement	

2.3 Nozzle Assembly and Stage preparation Facility (NASPF)

The facility used to assemble the nozzle with SSLV NE segment and to prepare the SSLV first stage segments for vertical assembly. The facility has vertical assembly structure with assembly platform and tilting fixture for SSLV first stage preparation activities.

S.No	Description	Value (LxWxH) mtr	Remarks
1.	Building Size	38.6 x 59.2 Height varies from 5 .0 (low bay) and 27.0 mtr (high bay)	Includes, high bay area, Nozzle assemble tower, SS1 tilting fixture, Check out room, control rooms, Chemical room, Service room &lobby , AC Service room and compressor room
2.	Ramp and Approaching road as per requirement	------	------
3.	Electrical Fittings	As per Requirement	Type :- FLP / Normal Electrical Service room
4.	Fire safety	Fire Hydrant as per requirement	
5.	PH	As per Requirement	
6.	Package AC System	Temperature and RH Controlled AC system	
7.	Sliding Door	As per Requirement	

2.4 Non Destructive Testing Facility (NDT)

NDT facility, fulfill the radiographic requirement of solid motors , segments and ignitors used in the launch vehicle. It is a concrete building of wall thickness varying from 2 mts to 1 mts. The solid motor / segment are inspected nondestructively and cleared for further process.

S.No	Description	Value (LxWxH) mts	Remarks
1.	Facility Building up Size	55 X 89.3 High bay Height (24 mts & 8.6 mts)	Built up size including Radiation bay, shielding wall, service rooms and dark room
2.	Ramp and Approaching road as per requirement	------	------
3.	Electrical Fittings	As per Requirement	Type :- FLP / Normal
4.	Fire safety	Fire Hydrant as per requirement	
5.	PH	As per Requirement	
6.	Package AC System	Temperature and RH Controlled AC system	
7.	Concrete Sliding Door	As per Requirement	

2.5 Upper Stage Assembly Facility -1 (UAF-1)

UAF- 1 facility used to prepare the SSLV second stage motor for assembly operations. The facility has vertical assembly platform for nozzle assembly operation and motor preparation.

S.No	Description	Value (LxWxH) mtr	Remarks
1.	Main Building Size	36.6 x 48.7 Height varies from 5 (low bay) to 16.6 mtr (high bay)	Includes, high bay area, SS2 trial actuation room, , Check out room, and control rooms, Material Handling room, Service room &lobby , AC Service room and compressor room
2.	Ignitor assembly Building (annex)	10 x 22.2	Low bay Ignitor store and assembly room and pyro room
3.	Ramp and Approaching road as per requirement	------	------
4.	Electrical Fittings	As per Requirement	Type :- FLP / Normal Electrical Service room
5.	Fire safety	Fire Hydrant as per requirement	
6.	PH	As per Requirement	
7.	Package AC System	Temperature and RH Controlled AC system	
8.	Sliding Door	As per Requirement	

2.6 Upper Stage Assembly Facility -2 (UAF-2)

UAF- 2 facility used to prepare the SSLV third stage motor for assembly operations. The facility has vertical assembly platform for nozzle assembly operation and motor preparation. The parallel operations of two stages motor is possible with the available configuration of UAF – 1&2.

S.No	Description	Value (LxWxH) mtr	Remarks
1.	Main Building Size	31.4 x 43.1 Height varies from 5 .6(low bay) to 16.6 mtr (high bay)	Includes, high bay area, SS3 trial actuation room, , Check out room, and control rooms, Chemical room, Service room &lobby , AC Service room and compressor room
2.	Ramp and Approaching road as per requirement	------	------
3.	Electrical Fittings	As per Requirement	Type :- FLP / Normal Electrical Service room
4.	Fire safety	Fire Hydrant as per requirement	
5.	PH	As per Requirement	
6.	Package AC System	Temperature and RH Controlled AC system	
7.	Sliding Door	As per Requirement	

2.7 Segment Storage and Magazine (SSM)

SSM facility facilitate the vertical storage of SS1 solid segment and horizontal storage of SS2 & SS3 motors.

S.No	Description	Value (LxWxH) mtr	Remarks
1.	Main Building Size	18 x 29.5 Height varies from 5 .0(low bay) to 16.6 mtr (high bay)	Includes, high bay area for segments storage , N_2 Cylinder storage , Service room and Security room
2.	Ramp and Approaching road as per requirement	------	------
3.	Electrical Fittings	As per Requirement	Type :- FLP / Normal Electrical Service room
4.	Fire safety	Fire Hydrant as per requirement	
5.	PH	As per Requirement	
6.	Sliding Door	As per Requirement	

2.8 Launch Control Centre / Mission Control Centre (LCC/MCC)

LCC/MCC used for launch control activities of SSLV vehicles. The facility majorly equipped with computer consoles and established networks for launch authorization and commands. The building also includes the VIP launch view gallery.

S.No	Description	Value (LxWxH) mtr	Remarks
1.	Main Building Size	33 x 26 Ground Floor and similar First Floor Different functional connected Rooms of 5 x 6.5 in both the floors	Main Building where all the executives will assemble, operate and control during launching. VIPs visiting gallery also part of it.
2.	Ramp and Approaching road as per requirement	------	------
3.	Electrical Fittings	As per Requirement	Type :- Normal Electrical Service room
4.	Fire safety	Fire Hydrant as per requirement	
5.	PH	As per Requirement	
6.	HVAC Systems	Chiller, AHU with Temperature and RH Controlled system	
7.	Provisional requirement for Passenger Lift	As per Requirement	
8.	Glass sliding Door	As per Requirement	

2.9 Technical Service Building(TSB), Base Fire Station(BFS), Ground level Reservoir(GLR)

TSB: The technical service building meets the SLC technical requirements. It has a provision to accommodate the senior executives, engineers and conference hall etc.

S.No	Description	Value (LxWxH) mtr	Remarks
1.	Main Building Size	36 x 28 x 4.5	Includes, Executives room, Engineers room, Conference hall , Service room &lobby , AC & electrical Service room
2.	Ramp and Approaching road as per requirement	------	------
3.	Electrical Fittings	As per Requirement	Type :- Regular fittings Electrical Service room
4.	Fire safety	Fire Hydrant as per requirement	
5.	PH	As per Requirement	
6.	Air conditioner	Split / Duct AC	

BFS: Base fire station shall cater the need of fire exigency. The fire tenderer, extinguishers and fire suppression systems are positioned for emergency. The facility shall monitor the fire alarms and FDA system in SLC.

S.No	Description	Value (LxWxH) mtr	Remarks
1.	Main Building Size	38 x 16 x 4.5	Includes, Surveillance room, Fire tender & jeep parking area , dress change room , Service room &lobby , electrical Service room
2.	Ramp and Approaching road as per requirement	------	------
3.	Electrical Fittings	As per Requirement	Type :- Regular fittings Electrical Service room
4.	PH	As per Requirement	

GLR: The ground level reservoir caters the water requirement for the planned fire hydrants. Each hazardous technical facilities have been with fire hydrants, as per safety protocols in addition to other forms of fire detection system. The GLR includes, 500 cum and 400 cum reservoir with water pump rooms and hydrant lines connecting the facilities.

S.No	Description	Value (LxWxH) mtr	Remarks
1.	Main Building Size	28 x 15 x 4.5	Includes, SPTA room, Engineers room, Maintenance room , Service room , pump room , GLR 400 cum& 500cum, electrical Service room
2.	Ramp and Approaching road as per requirement	------	------
3.	Electrical Fittings	As per Requirement	Type :- Regular fittings Electrical Service room
4.	PH	As per Requirement	

2.10 Main Receiving Station(MRS), Sub-station A,B & Launch Pad

MRS: The incomer 33/11KV, 6.3/8MVA distributed to SS 'A & B 'and launch pad. The approximate distance of HT cable (2run) between MRS and substations is 6.5KMs. The mode of running the cable is through underground and through trenches. Provision included for stand by power supply.

SS 'A' : Substation' A' meets the power requirements of NDT, Magazine and NASPF facilities. The LT cables(2run) are connecting the proposed facilities and the distance covered approximately 18KM. SSA has the provision of UPS (150KVA) connection to the attached technical facilities.

SS ' B': Substation 'B' meets the power requirements of SAF, UAF1&2, SPF and other non-hazardous facilities. The LT cables(2run) are connecting the proposed facilities and the distance covered approximately 20KM. SSA has the provision of UPS (150KVA) connection to the attached technical facilities.

2.10 Radar 1, 2 & 3

Radars are used to track the launch vehicle for range safety purpose. In SLC, three radar facilities, identical in civil construction, has been planned.

S.No	Description	Value (LxWxH) mtr	Remarks
1.	Main Building Size	24 x 17.5 x 4.5	Includes, Engineers room, Instrumentation room, , Service room &lobby , AC & electrical Service room
2.	Ramp and Approaching road as per requirement	------	------
3.	Electrical Fittings	As per Requirement	Type :- Regular fittings Electrical Service room
4.	PH	As per Requirement	
5.	Air conditioner	Split / Duct AC	

3. LOCATION & SAFETY ASPECTS

The facilities planned are located in proximity with the existing facilities for optimum management and sharing of resources. Augmented plant layout is planned as per safety requirements and geographical feasibilities, ensuring independent approach during construction phase, without disturbing the ongoing production activities.

SECTION-B
SCOPE OF WORK

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1. SCOPE OF THE WORK UNDER THIS CONTRACT

The total scope of **civil, PH, road, electrical, AC and mechanical works** covered in realization of the above facilities shall be carried out under the **supervision & inspection of service provider**. All construction and testing works carried out at site are covered under this contract. The major part is Civil construction works. Construction of the SLC project facilities includes the following:

1.1 Civil works

The civil works include construction, as per the construction drawings provided by the employer, on item rate/EPC basis inclusive of supply of all materials, construction and testing in respect of all facilities required for completion and handing over of the work as per technical specification and bill of quantities.

Broad scope of civil work shall include surveying, earthwork excavation, all types of foundations, RCC structure, brick masonry, finishing works in respective premises along with cable trenches, pipe trenches, road etc. for facilities listed in section A.

Scope shall also include construction of other miscellaneous units like pits, drains, trenches, paved areas, wherever necessary. Civil works shall also include all works required for completeness of the project including water supply, sanitary, plumbing, septic tanks, roads, etc. Special works like well sinking, piling, water proofing, sloped roofs etc. are also included in the scope.

1.2 Structural works

Scope of work includes steel structural work for the various crane gantry girders, manual and motorized steel sliding doors, swing doors – comprising of normal doors with MS sheet with / without bottom wheel, MS grill steel doors, lead sandwich steel door and framework of concrete doors which shall be installed on various RCC buildings of this project. The work shall also include various parking sheds for Heavy/Light vehicles parking. The work covers supply of all materials and consumables, fabrication, surface preparation, shop painting etc.

1.3 Electrical works

The scope of electrical works include 11 kV HT DG Set, 33/11 kV Transformer, 11 kV panel boards, 11 kV power distribution,LT power distribution system including substation panels, Distribution transformers, Compact Substations, UPS systems, Main PCC, sub panel board, UPS distribution, PDB, LDB, UPSDB, MCCB in cubicle, isolators both Non-Flame proof (Non-FLP) and Flame proof (FLP), switch sockets etc., Lighting system consist of LED FLP & Non_FLP light fittings, area lighting and signal lighting system, general electrical equipment/fittings other than above mentioned items consisting of FLP/ Non-FLP Air circulators, FLP/ Non-FLP exhaust fans, ceiling fans, LAN & telephone sockets etc , grounding/ earthing system , lightning protection system for facilities listed in section A.

1.4 Air conditioning & ventilation works

Air cooled chilled water system, Brine Chiller system, chiller water pumps, Air Handling Units, Ductable package units, cassette and split ACs, Suitable ducts and pipes for HVAC system, Air Heater system, DDC Control etc. are envisaged under the scope of Air conditioning & ventilation works for some of the facilities listed in section A.

2. SCOPE OF INSPECTION SERVICES

The scope of inspection/responsibility under each category and quality monitoring services are given below but not limited to:

Supplier is advised to keep necessary dedicated Internet accessible PC along with printer (preferably A3-Colour) for preparation of all the documents necessary for the day to day inspection activities, interface drawings, report generation and sharing with Department in-charge and project executives as per the requirement and as an when demanded.

2.1 Civil construction works:

A. Inspection and testing of materials & maintenance of registers:

(a) Checking of construction materials and collection of samples by the contractor from steel, cement, sand, brick, aggregate and any other materials used for construction and stamping at site for testing. Review of test reports to examine the quality and acceptance based on the results. Inspection of received material at site to assess quality.

(b) Witnessing sample collections and tests conducted by construction contractors as specified in the latest Indian standards and certifying the test results as per QAP.

(c) Maintaining of daily labour, daily cement, Material at Site (MAS), Quality Control related registers.

B. Checking of dimensions & alignment:

(a) Dimensional verification as per department approved drawings and standards.

(b) Checking the coordinates of various members of structures.

(c) Checking the alignment of RCC structural members.

(d) Checking of the staircase interfaces with the structures, etc.

(e) Inspection of dimensions, orientation & level of all RCC structures, beams & foundation etc., during various stages of construction.

(f) Verification of the correctness of structural member construction with reference to approved detailed drawings.

(g) Checking of accuracy of placement of all inserts/embedment during construction as per required tolerances.

(h) Checking of alignment/leveling of sole plates/I beams/foundation bolts as per the tolerances.

C. Inspection of work and Monitoring of progress during site execution:

(a) Visual inspection of soil during construction and intimating variations if any with respect to soil investigation and report to contract manager/ EIC for further inspection.

(b) Inspection and clearance at different stages of construction works: (1) Foundation (2) Flooring with ground anchor (3) Floor levels as specified in tender (4) Roof level (5) Other services & utilities.
(c) Witnessing the execution of all concealed items before concreting and certifying the same.
(d) Monitoring the hydro test of pipelines and certifying the same.
(e) Preparation of Running Account (RA) bills, extra/deviation/substitution items.
(f) Certification of various items of work executed with quantity measurements submitted by contractors and responsible for checking the measurements and clearing the bills on fast track mode.
(g) Witnessing the calibration of concrete batching plant and other equipment at the laboratory established by the construction agency.
(h) Issue of final acceptance certificate: Verification of acceptance test reports and issue of stage wise inspection report for bill verification and final inspection report at the time of handing over of building. Inspection Agency shall certify the total scope of work carried out and submit three copies of overall inspection document to Department in proper printed formats duly signed including as-built drawings.
(i) Monitoring the progress of work on day to day basis and preparation of weekly/monthly progress reports based on the reports of progress of work by contractor.
(j) Party shall bring to the notice of the Department if any slippage or bottle neck occurs at any point of construction.
(k) Assessment of labour required from time to time to meet the targeted construction programme.

D. Ensuring safety and Quality during construction:
(a) Review and supervision of safe construction practices during construction as per agreed Health, safety and environment (HSE) documents. Deviations to be informed to the contract manager immediately.
(b) Ensure that contractors carry out work in accordance with the approved Quality Assurance Plan (QAP) to meet the quality standards as per standards/codes.
(c) Party shall ensure that Department requirements are totally fulfilled as indicated in the contract by adopting necessary checklists and quality measures.
(d) Enabling to sort out on the issues on quality of construction arising at site, suggesting measures to improve quality.
(e) Monitoring and follow up of field and laboratory test plan schedules with contractor and ensuring timely carrying out test for smooth and quality construction.

E. General Activities:
(a) Extra work / variation assessment and certification of estimate for recommendation of payment. The decision of the Engineer In Charge shall be final as regards to extra work/ variation assessment and certification of estimate.
(b) Any other work assigned by the Engineer In Charge which are not explicitly mentioned in the contract.
(c) Tenderer shall submit the documentary evidence for the qualification and experience of people to be deployed for obtaining clearance from the Department.
(d) Verification of welding joints etc as per drawings and witnessing the weld tests.

(e) Alignment of doors/ drive systems.
(f) Testing of AC ducts and chilled water piping systems
.

2.2 Electrical systems works:

A. Before commencement of work:
(a) Preparation and get the approval of conduit wiring details towards concealed conduit for each and every rooms of all the facilities, lights and power points.
(b) Preparation and get the approval of cable routing towards various distribution boards, power outlets, LAN points, Telephone points, etc.
(c) Preparation and get the approval of earth strip layouts for various rooms and interfacing towards civil construction.
(d) Civil cut outs required in wall based on the prepared routing of cable or cable trays and as mentioned in electrical / civil drawings.
(e) Civil cut outs required in wall based on the dimension of exhaust fan for both general & toilet.

B. Before commencement of roof casting:
(a) Inspection and clearance as per the department approved drawing towards the conduit preparation for concealed conduits.
(b) Inspection of conduit routing and quantity of conduits (based on no. of wires drawn inside the conduits) as per the standards followed in SDSC SHAR and as per the department approved drawing for each and every room of all the facilities.
(c) Inspection of placement of junction boxes for the concealed conduits as per the standards followed in SDSC SHAR and as per the department approved drawing.
(d) Clearance towards the position of hook points for ceiling fan, high bay lights as per the approved drawings.

C. Activities to be carried out in co-ordination with Civil and User:
(a) Clearance towards distribution boards placement & control points for the lights in the identified place as per the approved drawings.
(b) Clearance towards conduits laying in wall for various light and power points as per the approved drawings.
(c) Clearance for locating the earth pits and routing of the earth strips.
(d) Clearance of locating the exhaust fan point after finalizing the location of exhaust fan for both general as well as toilet in order to restrict the joint in the power cable.

D. Activities to be carried out in co-ordination with Civil and A/C:
(a) Clearance towards conduits laying in wall for various split A/C points and cable routing for the indoor units as per the approved drawings.
(b) Preparation of schedule & routing of cables towards the A/C chiller units, water pumps, AHUs, heater banks, etc.

(c) Ensuring the bill of quantities (BOQ) mentioned in the estimates are not exceeding its limits.

E. Activities to be carried out in co-ordination with Civil and Project team:
(a) Clearance towards various conduit pipes required as mentioned in the work order based on the request by various users in Project team.
(b) Preparing a schedule of cables towards the interfaces between users equipments, various substations and facilities.
(c) Clearance towards conduits laying in wall for various network points (Campus network) and cable routing for the same as per the direction of SLC Project.
(d) Plan for routing of cables without interference with Electronic Instrumentation System, telecom and network cables.

F. Activities to be carried out in co-ordination with Civil and Telecom:
(a) Clearance towards various conduit pipes required as mentioned in the work order based on the request by user and Telecom.
(b) Preparing a schedule of cables towards the interfaces between tag block and telephone points.
(c) Consultation with telecom for supply and concealing the supplied tag block by the telecom.

G. Activities to be carried out in co-ordination with Various Suppliers:
(a) Receipt of items and unloading with the help of project team and suppliers to the identified place as per the instruction of department.
(b) Supervision of erection of all the items/equipments as per the tender document of each and every facilities as listed in Section A.
(c) Preparation of checklists for testing of all the electrical equipments.
(d) Participate during the Testing and commissioning of all the above said items/equipments.
(e) Testing of safety systems
(f) Submission of Test Results document as per the test carried out by the supplier for the review to department.

H. Test and qualification:
(a) Ensuring the no. of wires drawn inside the conduits as per the standards.
(b) Ensuring all the MCBs, ceiling fan, air circulators, exhaust fans, etc and its controls are working as expected.
(c) Ensure all the light fittings functionality as expected and as per the control planned in the approved electrical scheme.
(d) Measurement of illumination level room wise in every facility and submission of document.
(e) Ensure the functionality and quality of all the power outlets provided as per the approved drawings.
(f) Assists for testing of 11 kV Power Distribution panel, Transformers, DG Sets, LT power distribution panel, power factor correction panel, Power Control Centre (PCC).
(g) Testing of UPS and its battery bank with the necessary co-ordination with the test loads.

(h) Testing of Distribution boards, ELMCBs and ELR of PCC panels.
(i) Measurement of Insulation Resistance (IR) values of all incoming/outgoing cables
(j) Measurement of Earth resistance values of all earth pits of individual facilities.
(k) Ensuring the proper test reports for each and every supply items.
(l) Preparation of as-built electrical scheme for internal/external cable routing, earth strip routing in co-ordination with project.
(m) Preparation of as-built single line diagram for various electrical distribution boards like LDB, PDB, A/C DB, UPS DB, etc.
(n) Other related electrical activities towards the smooth realization of electrical systems.
(o) Preparation of central level inspection committee (CLIC) reports as per the existing CMG practice.
(p) Ensuring safety at site especially for high rise buildings.
(q) Preparation of final bill and handing over of building to user.

H. General Activities:
(a) Giving day to day clearances at site to execute the work as per approved construction drawings and as per work order specifications.
(b) Maintaining registers for daily labour, material inward/outward (consumption of materials) etc.
(c) Measurement of cable length (LT, HT, Data and communication) for the each and every distribution & various earth strips in all the facilities.
(d) Documentation of facility end switch gear viz.Panel board and DBs.
(e) Support for coordination of relays/feeder current protection settings and documenting the same.
(f) Extending support for carrying out T&E Procedures and documenting the same in digital format.
(g) Maintaining quality and safety related documents.
(h) Preparation of Running Account (RA) bills, extra/deviation/substitution items.
(i) Monitoring of progress of work and budget as per the schedule.
(j) Receipt, unload, safe storage and inspection of various equipments/items/materials at site.

2.3 Air conditioning & Mechanical works:
A. Before commencement of work:
(a) Embedment plates in roof / ceilings / walls to be checked for laying of AC ducts or piping etc.
(b) Civil cut outs furnished in drawings to be executed during construction.
(c) Cross checking of various civil, AC drawings to avoid interference with user equipments / lightings / power cables etc.

B. Activities to be carried out in co-ordination with civil, electrical and instrumentation:
(a) Co-ordination with AC erection team and electrical team for laying cables etc.
(b) Pedestals casting and positioning to install chillers, package units, pumps, AHUs etc.
(c) Routing, laying of CS / copper pipelines, AC ducts, etc.

(d) Digital and analogue inputs/outputs and its interlock with AHUs and chiller packages etc. and positioning of sensors.
(e) Supervision of all the activities pertaining to DDC system as per the requirement of project and as mentioned in tender.

C. Test and qualification:
(a) Preparation of checklists for testing of AC equipments.
(b) High side (water) and low side (air) balancing as per design.
(c) Testing of safety systems.
(d) Testing & commissioning of pumps / chillers / air handling units / package units, etc.
(e) Verification of all electrical values like insulation resistance of winding or cables etc. and necessary clearance to be obtained from electrical team.
(f) Seasonal test run of all AC systems and evaluation of its performance as per the requirement.
(g) Preparation of CLIC reports as per the existing CMG practice.
(h) Preparation of Running Account (RA) bills, extra/deviation/substitution items.
(i) Preparation of final bill and handing over of building to user.
(j) Measurement of copper pipes and cables used for installation as per user requirement and testing of split/cassette/window ACs.

D. General works:
(a) Giving day to day clearances at site to execute the work as per approved construction drawings and as per work order specifications.
(b) Maintaining registers for daily labour, consumption of materials, material inward/outward, progress of work, test certificates, etc.
(c) Measurement of duct length and CS/copper piping for all the facilities.
(d) Issue of material and monitoring of stock items.
(e) Preparation of RA bills, extra/deviation/substitution items.
(f) Monitoring of progress of work and budget as per the schedule.
(g) Verifying the test certificates of various equipment, material etc.
(h) Supervision of erection works and ensuring quality as per prevailing standards.
(i) Follow up of the day to day erection activities, man power attendance & development, ensuring entry permits for the contract staff to site, etc.
(j) Receipt, unload, safe storage and inspection of various equipments/items/materials at site.
(k) Ensuring technical specifications & quantity of the received material in line with work order.
(l) Verification of as-built diagrams prepared by AC consultant etc.
(m) Ensuring the BOQ mentioned in the estimates are not exceeding its limits.
(n) Ensuring safety at site especially during duct and pipe erection / fabrication.
(o) Ensuring safety at site especially for high rise buildings.
(p) Ensure neatness in the premises of works.

3. QUALITY ASSURANCE PLAN (QAP)

QAP will be approved by Department in consultation with inspection agency and construction contractor. Once the document is finalized the supervision service provider is responsible to ensure the inspection strictly as per the approved QAP. All checkpoints are as

per QAP required to be inspected thoroughly for meeting the system specification. Deviations if any shall be brought to the notice of Department and contractor for rectification.

4. SCHEDULE OF DEPLOYMENT

The Service provider shall depute qualified and experienced inspection engineer(s) as per the qualification given in table continuously at site for quality inspection as per site requirements. The deployment of the personnel shall be as per the time schedule specified in the table.

- T- Start of the main construction contract

Sl. No.	Category	Approx. numbers	Qualifications and experience	To be provided at (tentative)
1	Engineer- Civil	02	B.E/ B. Tech (Civil) with more than 5 years experience	T+0 months
2	Site Engineer (Civil)	05	Diploma with more than 5 years experience Out of five (5) one Engineer shall have experience with Industrial Safety.	T+0 months
3	Engineer- Electrical	01	B.E/ B. Tech (Electrical) with more than 5 years experience or Diploma with more than 10 years experience	T+6 months
4	Site Engineer (Electrical)	02	Diploma with more than 5 years experience	T+12 months
5	Site Engineer (AC &Mechanical)	01	Diploma with more than 5 years experience	T+12 months
	Note: 1. BE/ B Tech in Engineering passed with First Class personnel only are to be deployed. 2. Personnel with Experience in Major Civil buildings & RCC Structures only will be considered 3. Prior to deputing the personnel at site, the third party agency shall submit the qualification and experience of people to be deployed for obtaining clearance from the Department.			

4.1 JOB DESCRIPTION

S No	Category	Brief Role
1	Engineer (CIVIL)	1. Overall Co-ordination of all the sub works of this project 2. On site design coordination and issue of drawings/clarifications 3. Organize approval to contractors shop drawings, product data sheets, samples 4. Refinement of works breakdown structure 5. Monitoring the progress of work with the master construction schedule

		6. Prepare QA/QC plan and method statement 7. Quality assurance and control to ensure conformance to drawings and specifications 8. Checking of bills/ measurements submitted by Contractor 9. Reconciliation and certification of final bills of contractor. 10. Preparation of Project close-out report.
2	Site Engineer (CIVIL/ELEC/AC)	1) Precise supervision of the work as per Work order, specifications, codal provision and QAP. 2) Dimensional verification as per department approved drawings and giving clearances at site. 3) Conducting/witnessing field and laboratory tests on materials, work etc. 4) Carrying out independent tests as may be necessary. 5) Apprising Engineer In Charge (EIC) or his Authorized Representative about the quality related matters in the work under supervision. 6) Visit to the laboratories for the test witness. 7) Visit to inspect quarry site for source approval and submitting report. 8) Checking of Bills, Measurements etc 9) Maintaining the register of tests conducted stating all relevant details 10) To submit Progress Reports in the format approved by EIC 11) Supervision throughout the important Concreting activities. 12) Any other works assigned by EIC

4.2 DELIVERABLES

a. Minimum deployment of staff as per 4.0 above
b. Works cited in section 2 (Section-B)
c. Witnessing all QC Tests and signing in reports
d. Checking of Bills, Measurements etc and signing in all bills
e. To submit Monthly Progress Reports
f. Submit Fortnightly QC compliance statements
g. Maintaining all mandatory QC registers (like cement, steel, cube test, material test, labour register, hindrance registers etc)
h. Third party Agency certification of the total scope of work after completion
i. Project close-out report

SECTION-C
GENERAL TERMS & CONDITIONS

SECTION-C
GENERAL TERMS & CONDITIONS

GENERAL TERMS & CONDITIONS:

(a) Service provider shall appoint engineers at site who shall be "Competent Personnel" of requisite experience mentioned in point 4.0 of section B. The experience of personnel shall be in RCC high rise building constructions. However the Inspection Agency shall provide bio-data along with documentary proof for qualification and experience of the personnel proposed to be deployed for Department's approval. Addition and deletion in the personnel list shall be effected only with prior approval of ISRO with reasonable advance notice to ensure that inspection services do not suffer at any time whatsoever.

(b) The duration of the contract will be 24 months (approx). The number of personnel required will be intimated from time to time based on the requirement and the service provider has to provide accordingly.

(c) The construction work shall be, in general, six days in a week and also beyond office hours, holidays whenever required. Deployed staff shall meet the spontaneous demands of construction works.

(d) Service provider shall make own arrangement for accommodation, transport to site of work, medical facility, food, communication facility for their personnel.

(e) In case of demand for mobilizing additional manpower for few days, party shall provide support of one (or) two engineers on daily basis which will be paid on pro-rata basis.

(f) Party shall not issue any news release, articles, brochure, advertisements, prepared speeches, and other information covering the contract works without written approval of ISRO, SDSC SHAR regarding the content and timing of such release.

(g) The technical information, drawings, specifications and other related documents (which are all confidential) furnished by ISRO is the property of ISRO and shall not be disclosed or handed over to any other agency except for the purpose of execution of the contract.

(h) Site office: One room without any office furniture / equipment will be provided to party to carry out the day to day activities subject to availability. Required Office furniture/computers/Printers/Office stationeries shall be arranged by service provider.

(i) Payment terms: Payment will be made on monthly basis against producing invoice certified by the Engineer In Charge as per the agreed rates per month. In case of absence in the month, necessary deductions will be effected based on the pro-rata basis considering working days in that calendar month. Public holidays as per Government circular will be considered.

(j) Taxes: All statutory taxes including GST, levies etc shall be indicated separately in schedule of prices (Annexure-1).

(k) The rates quoted by contractor shall include minimum wage prevailing in the State for respective personnel, Principal Employer's contribution and Employee's contribution to Employees Provident Fund (EPF), ESI at prescribed rates, and bonus as per the Act. It should be ensured that the contractor comply with all labour laws, minimum wages act, payment of EPF and ESI, as applicable. The contractor shall indemnify and compensate SDSC SHAR, if SDSC SHAR as Principal Employer under the Contract Labour (Regulation & Abolition) Act, 1970 becomes liable to assume any liability towards the workforce

engaged by the contractor. In the event, the provisions relating to recovery as provided in the relevant clauses of the said Act shall be applicable in toto.

(l) Entry permit: Dept. will issue 'Entry permit' to the service provider personnel subject to prior submission of photo(s), address proof and antecedent certificate from Police dept. The photo identity card may be smart card/biometric type without which entry will not be permitted. The cost of ID card shall be borne by the service provider.

(m) Penalty Clause: Liquidated damages are applicable in case of any short supply of manpower below the nominal deployment, corresponding amount for the absent manday will be deducted from the monthly bill, a penalty of 10% of manday rate for the respective category will be deducted for each day of absence beyond one month period subject to a maximum of 10% of total order value.

Party has to deploy the manpower within one calendar month from the date of request from Department, otherwise penalty clause will be applicable.

(n) **Extension:** The contract can be extended by another one more term / part there off on mutually agreed terms and conditions, if the services are satisfactory and based on the progress of site work.

(o**) Price :** Quoted price by the party is firm and fixed throughout the contract period.

Note: Service provider has to supply additional manpower when ever need arises and payment will be made same as per quoted rates.

SECTION-D
ANNEXURES

Annexure-1

FORMAT FOR SCHEDULE OF PRICES

Sl. No	Description	Qty	Unit of measure	Rate per unit (Rs.)	Total Amount (Rs.)
1	Engineer- Civil	48	Man-month		
2.	Site Engineer(Civil)	120	Man-month		
3.	Engineer- Electrical	12	Man-month		
4	Site Engineer(Electrical)	24	Man-month		
5	Site Engineer(AC &Mechanical)	12	Man-month		
	Sub Total (A)		Man-month		
	Goods and Service Tax (GST) on (A)				
	Any other taxes & levies as applicable	%			
	Sub total (B)				
	Grand total (A=B)				

Category wise manday rate:

S. No.	Category of personnel	Rate per person per manday (Rs.)	Rate per person per manday in words.
1.	Engineer- Civil		
2.	Site Engineer(Civil)		
3.	Engineer- Electrical		
4.	Site Engineer(Electrical)		
5.	Site Engineer(AC &Mechanical)		

Note:

1. This table is to be used for arriving cost of category wise Man- month given in the above table.

2. Please do not fill rates and amount for the document being uploaded in Technical and unpriced Commercial bid i.e., Part-1. However, rate/ amount to be filled for price bid i.e., Part-2.

Annexure -2

FORMAT TO BE FILLED AND SUBMITTED BY TE BIDDER

A. Details of Company/ Firm:

S.No	Description	Supplier response		
1.	Name of the Company/Firm			
2.	Type of the company (Proprietary/ Pvt. Ltd/Public Ltd/Joint Venture/ Consortium)			
3.	If company is consortium please provide the signed copy of consortium agreement document.			
4	Registration number & Certificate			
5.	Name & address of he office of the chief Execute of the company.			
6.	Contact person for this tender with name & address and contact number			
7	Locations of the branches of company (if any).			
8.	From which year the company is in operation.			
9.	Current annual turn –over of the company.			
10.	IT returns for the last 3 years to be attached			
11.	The Profit & Loss Account details for the last 3 years which is duly audited and submitted as part of the Annual Report.(Rs. In Lakhs only)			
		2021-22	**2022-23**	**2023-24**
	Total assets(A)			
	Current assets(B)			
	Total liabilities(C)			
	Current liabilities (D)			
	Net worth(A-C)			
	Working capital(B-D)			
	Turnover			
	Profit & Loss			
12.	Manpower details (Technician, Supervisor, QA & Inspection) (Organization Chart)	**Description**	**No. of persons**	**Remarks**
		Engineers		
		Admin& Accounts		
		Supervisor		
13.	The major customers for whom similar works were provided (Enclosed copies of the purchase orders)			
14.	Any customers feedback on the services which is in writing (Pl. enclose copies)			

B. Details of last 5 years works executed & completed by the contractor:

S.No	Full postal address of the client with contact person	Name of the works	Value of the work (Rs. In Lakhs)	Nature/ Scope of works
1.				
2.				
3.				

Note: In order to consider as valid experience, all the experience has to be supported with the completion certificate and purchase order/ work order.

C. Details of present works being executed by the contractor:

S.No	Full postal address of the client with contact person	Description of the works	Value of the work (RS. In Lakhs)	Nature/ Scope of works
1.				
2.				

Note: Copy of Purchase orders may be enclosed.

Category wise manday rate:

S.No.	Category of personnel	Rate per person per manday (Rs.)	Rate per person per manday in words.
1.	Engineer (Civil)		
2.	Site Engineer(Civil)		
3.	Engineer (Electrical)		
4.	Site Engineer (Electrical)		
5.	Site Engineer (AC &Mechanical)		

Note: This table is to be used for arriving cost of category wise Man-month given in Annexure-1.

Signature of authorized person with seal

Note: Annexure-2 is to be uploaded in Technical and unpriced commercial bid (Part-1).